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(21) International Application Number: PCT/US97/09533 (22) International Filing Date: 3 June 1997 (03.06.97) (30) Priority Data: 08/656,716 3 June 1996 (03.06.96) US 08/835,728 11 April 1997 (11.04.97) US (71) Applicant: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE [US/US]; 722 Rutland Avenue, Baltimore, MD 21205 (US). (72) Inventors: HERMAN, James, G.; 14 Talbott Avenue, Timon-town, MD 21093 (US). BAYLIN, Stephen, B.; 6903 Marlborough Road, Baltimore, MD 21212 (US). (74) Agent: HAILE, Lisa, A.; Fish & Richardson P.C., Suite 1400, 4225 Executive Square, La Jolla, CA 92037 (US).		(81) Designated States: CA, IL, JP, Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i>

(54) Title: METHYLATION SPECIFIC DETECTION

(57) Abstract

The present invention provides a method of PCR, methylation specific PCR (MSP), for rapid identification of DNA methylation patterns in a CpG-containing nucleic acid. MSP uses the PCR reaction itself to distinguish between methylated and unmethylated DNA, which adds an improved sensitivity of methylation detection.